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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

MOUTTET, BLAISE L

ART UNIT PAPER NUMBER

2853

DATE MAILED: 12/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/016,154

Applicant(s)

ASAKAWA, STUART D.

Examiner

Blaise L Mouttet

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 October 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 22-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-12 and 13-21, drawn to a specialty ink jet ink and an aqueous ink jet printing system, classified in class 347, subclass 100.
  - II. Claims 22-27 and 38-40, drawn to a method for marking a document as an original and a method of providing clients with original document marking services, classified in class 347, subclass 107.
  - III. Claims 28-37, drawn to a method of generating revenue, classified in class 700, subclass 235.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as product and process of use.

Inventions I and III are related as product and process of use.

The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the processes of groups II and III do not require the specific ink recited in the claims of group I.

inventions ii and iii are related as subcombinations disclosed as usable together in a single combination.

The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention III has separate utility such as for generating revenue. See MPEP § 806.05(d).

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Mr. Bradley Haymond (Reg.No.35186) on November 19, 2002 a provisional election was made without traverse to prosecute the invention of group I, claims 1-21. Affirmation of this election must be made by applicant in replying to this Office action. Claims 22-40 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

### ***Claim Objections***

2. Claim 19 is objected to because "the bore size" should more clearly be recited as --the bore size of the particulates-- in accordance with applicant's written description and to achieve adequate connection to claim 13 from which claim 19 depends.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2853

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 13-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Hall et al. US 5,398,131.

Hall et al. discloses, regarding claims 1, 13 and 16, an aqueous ink-jet ink printing system, comprising:

a specialty ink jet ink comprising an ink vehicle (the volatile media of column 5, lines 38-46) having dispersed therein an effective amount of particulates having directionally dependent multicolor light reflective properties when dried on a substrate and exposed to light (the microencapsulated liquid crystals of column 5, lines 38-46); and

a specialty ink jet ink pen configured for jetting the ink jet ink (column 6, lines 45-54).

Regarding claim 14, both piezoelectric and thermal pens are taught to be utilized (column 1, lines 48-66).

Regarding claim 15, a transparency is used as the substrate (column 6, lines 62-64).

Regarding claim 17, multi-layering of the LC ink is taught in column 6, lines 50-54.

4. Claims 1, 8-11 and 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Bishop et al. US 5,679,138.

Bishop et al. discloses, regarding claims 1, 13 and 16, an aqueous ink-jet printing system comprising:

a specialty ink jet ink comprising an ink vehicle (column 8, lines 47-49) having dispersed therein an effective amount of particulates (the dispersed pigments), said particulates having directionally dependent multicolor light reflective properties when dried on a substrate and exposed to light (column 9, lines 3-52 discuss this aspect of the ink's properties); and

a specialty ink jet pen ink-jet pen configured for jetting the ink jet ink (column 8, lines 57-59).

Regarding claim 8, the pigment particulates are taught to be provided in a range from below 0.009 microns to above 0.026 microns in the example of column 7, lines 48-67. The range is taught to be extended up to the upper bound of 0.100 microns in column 3, lines 8-12.

Regarding claim 9, the pigment particulates are taught to be present in the ink vehicle in a range of approximately 0.1-10% (column 5, lines 61-65).

Regarding claims 10 and 11, the pigments are ink colorants (column 4, line 62 - column 5, line 6).

Regarding claim 14, both thermal and piezoelectric ink jet pens are cited as the selected pen (column 6, lines 59-67).

Regarding claim 15, a substrate is printed upon (column 8, lines 57-63).

5. Claims 1, 2, 5, 6, 9, 10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Okuda et al. US 5,779,777.

Okuda et al. discloses, regarding claim 1, a specialty ink comprising:  
an ink vehicle (as referenced in column 3, lines 1-3); and  
a sufficient amount of particulates (pigments) having directionally dependent light reflective properties (i.e. glossiness) dispersed within the ink vehicle such that when the ink is substantially dried on a desired substrate, a multicolored reflected light is emittable in the presence of a light source (column 2, lines 36-39).

Regarding claim 2, pearlescent pigment particulates are specified (column 2, lines 36-39).

Regarding claims 5 and 6, 1-30 microns, preferably 2-15 microns, is specified as the particulate size range (column 2, lines 36-39).

Regarding claim 9, 1-20%, preferably 2-15%, is specified as the particulate presence in the ink vehicle by weight (column 2, lines 51-57).

Regarding claims 10 and 12, additional colorant pigment is utilized attached to the pearlescent particulates (column 3, lines 1-13).

It is noted by the examiner that the claims refer to "ink-jet ink" but nothing in the claim limits the composition claimed to a use in an ink jet environment and therefore merely reciting ink as "ink-jet ink" does not limit the scope of the claim since it has no apparent effect on the structure of the composition. See MPEP 2112.01.

6. Claims 1-4, 7, 10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Bujard et al. US 5,855,660.

Bujard et al. discloses, regarding claim 1, a specialty ink comprising:

an ink vehicle (column 11, lines 30-39); and

a sufficient amount of particulates (the core particles of the pigment as described in column 6, lines 26-32) having directionally dependent light reflective properties dispersed within the ink vehicle such that when the ink is substantially dried on a desired substrate, a multi-colored reflected light is emittable in the presence of a light source (column 1, lines 17-30).

Regarding claim 2, mica particles are selected for the core (column 6, lines 33-49).

Regarding claim 3, the core is plate-like shaped (column 6, lines 26-32).

Regarding claim 4 and 7, the particulates are cited to have lengths and widths falling into the range of 3-200 microns and thicknesses ranging from 0.1-5 microns (column 6, lines 26-32).

Regarding claims 10 and 12, other coloring pigments are taught to be attached to the mica pigments (column 10, lines 54-60).

It is noted by the examiner that the claims refer to "ink-jet ink" but nothing in the claim limits the composition claimed to a use in an ink jet environment and therefore merely reciting ink as "ink-jet ink" does not limit the scope of the claim since it has no apparent effect on the structure of the composition. See MPEP 2112.01.



***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 13, 15 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gompertz et al. US 5,742,306 in view of Bujard et al. US 5,855,660.

Gompertz et al. discloses, regarding claim 13, an aqueous ink jet printing system comprising:

a carrier for ink jet ink pens that print on a substrate which is designed to be upgradeable by adding new ink pen types (see abstract, column 3, lines 31-37).

Gompertz et al. fails to disclose a specialty ink jet pen containing a specialty ink as specified in claims 13 and 18-20.

Bujard et al. teaches, regarding claim 13, utilizing pigment based inks for printing comprising an ink vehicle (column 11, lines 30-39) having dispersed therein an effective amount of particulates (core particles) having directionally dependent properties (column 1, lines 4-30).

Bujard et al. teaches, regarding claims 18-20 the length and diameter ranges in column 6, lines 26-32.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to upgrade the inkjet printer taught by Gompertz et al. by providing an inkjet pen having the colored-effect pigment inks of Bujard et al.

The motivation for doing so would have been to achieve improved colored properties of printed material as taught by the abstract of Bujard et al.

8. Claims 13, 15 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gompertz et al. US 5,742,306 in view of Sugita et al. US 5,570,205 and Ostertag et al. US 5,573,584.

Gompertz et al. discloses an aqueous ink jet printing system comprising:

a carrier for standard ink jet ink pens of black and colored inks which print on a substrate which is designed to be upgradeable by adding new ink pen types which ride along with the standard pens (see abstract, column 3, lines 31-37).

Gompertz et al. fails to disclose a specialty ink jet pen configured for jetting the specialty ink jet ink specified and that the specialty ink jet pen is activated when an original is to be marked.

Sugita et al. discloses a common carrier path for originals to be marked and copies to be printed upon (see abstract).

Ostertag et al. discloses a specialty pigment ink comprising an ink vehicle having dispersed therein an effective amount of particulates having directionally dependent light reflective properties which are used to mark originals to protect them from forgery (column 1, lines 5-10).

It would have been obvious for a person of ordinary skill in the art at the time of the invention to include a common paper path for originals and copies for the printer of Gompertz et al. as taught to be utilized in the facsimile apparatus of Sugita et al.

The motivation for doing so would have been that Gompertz et al. suggests incorporation of the printer mechanism in a facsimile device (column 3, lines 51-62) and the facsimile of Sugita et al. offers economic advantageous of reduced size (column 2, lines 1-3).

It would have been obvious for a person of ordinary skill in the art at the time of the invention to utilize a specialty ink pen with the specialty ink that selectively marks originals taught by Ostertag et al. in the apparatus of Gompertz et al. in view of Sugita et al.

The motivation for doing so would have been to prevent forgery of originals as taught by column 1, lines 5-10 of Ostertag et al.

#### ***Additional Prior Art***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Phillips et al. US 5,171,363 discloses an optically variable printing ink utilizing thin film flakes with an aspect ratio of 2:1 and of 2-20 microns in size.

Herget et al. US 5,455,671 discloses a printing ink utilizing pearlescent pigments suspended in an ink vehicle at 5-20% by weight.

***Contact Information***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Blaise Mouttet whose telephone number is (703) 305-3007. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Barlow, Jr. Art Unit 2853, can be reached on (703) 308-3126. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Blaise Mouttet November 29, 2002

Bm 11/29/2002

  
JUDY NGUYEN  
PRIMARY EXAMINER